

**CHEMICAL ARRAYS AND METHODS OF PRODUCING THE SAME**

**ABSTRACT OF THE DISCLOSURE**

**[00170]** Methods and devices for fabricating a chemical array are provided. Embodiments include determining a chemical array layout in which each feature in the layout has a size that is chosen based on its composition and fabricating a chemical array according to the chemical array layout. In certain embodiments, at least two features of an array fabricated according to the subject methods are of different sizes. Embodiments also include chemical arrays having features of different sizes, e.g., fabricated according to the subject methods. Also provided are embodiments that include fluid deposition devices capable of fabricating chemical arrays having features of different sizes, e.g., for use in practicing the subject methods. Algorithms present on computer readable mediums for use in practicing the subject methods may also be provided in certain embodiments. Embodiments of the subject invention may also include systems and kits for use in practicing the subject methods.